

The European Working Time Directive, Work-Life Balance, and Patient Safety

EAPH, Barcelona

Joe Collum

Senior Medical Advisor

NW Strategic Health Authority, UK



NHS North West

**Junior Doctor
Advisory Team**

December 2010



•10 Strategic Health Authorities (SHAs) in England

NHS North West

Background

- A **'long working hours' culture** is prevalent in the UK (*in 2005 the UK had the longest working week in Europe*)
- Work/Life balance has often been sacrificed in favour of professional values, especially in medicine.

Background

- The European Working Time Directive (EWTB) first appeared in 1993
- Incorporated into UK law in 1998
- *'... the average working time for each seven-day period, including overtime, does not exceed 48 hours'*

Background

- Restriction of doctors' working hours was implemented gradually within the UK- **an incremental reduction to 48 hours by August 2009**
- *NHS North West undertook a project to implement the 48 hour limit **one year ahead of schedule** in Aug 2008*

Background

- **EWTD was/is a source of major controversy in the UK**
- **Opinion (both professional and public) is markedly divided...**

“Patients will die if the government pursues plans to stop doctors working more than 48 hours a week...”*

*Campbell D. Doctors' leader warns 48-hour week will endanger patients' , ***The Guardian, Saturday 11 April 2009***

“If the 48-hour week is introduced as planned on 1 August, patient safety is going to be reduced. People are going to die because of this...”*

*John Black, ***President of the Royal College of Surgeons***, The Guardian, Saturday 11 April 2009

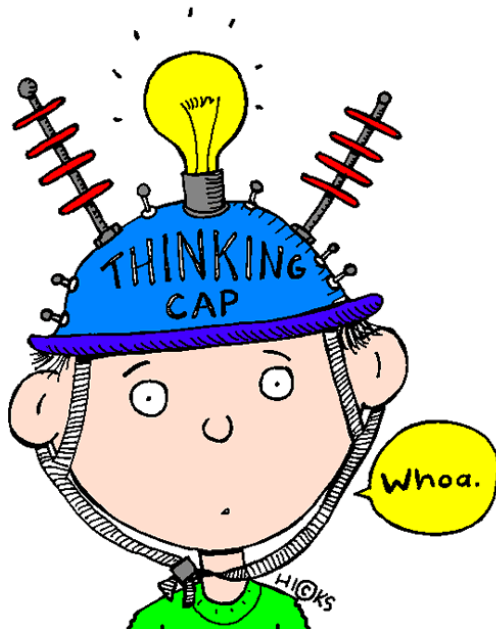
“...excessive hours of work for doctors in training are damaging to the individual doctors health, their individual safety and to patient safety.”*

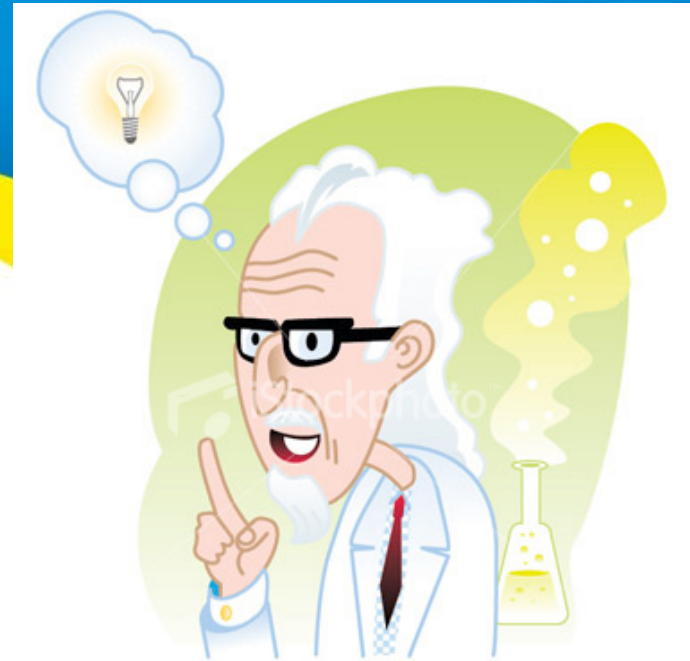
***“Tired doctors are not safe
doctors...”****

To address this debate, NHS North West undertook a study to collect **objective** data around patient safety and the EWTD...



In August 2008, **NHS North West** implemented a 48 hr working week. The rest of **England** did not implement this limit until August 2009...





This allowed a ‘window’ during which parameters of **patient safety in NHS North West could be compared to the rest of the country**

METHODS

- **Hospital Standardised Mortality Ratio (HSMR)**
 - **Average Length of Stay (ALOS)**, and
 - **Standardised Readmission Rate (SRR)**
- **3** financial years from 2006/2007 to 2008/2009
- Across all **acute Trusts**, and **all specialties**
- **NHS North West** and **National** data were compared

Hospital Standardised Mortality Ratio (HSMR)

- The HSMR compares the number of expected deaths with the number of actual deaths in a ratio

$$\frac{\text{observed deaths}}{\text{expected deaths}} \times 100$$

HSMR

The rates are adjusted to **standardise** for difference in case mix, including:

- Sex
- Age group
- Method of admission
- Socio-economic deprivation (Carstairs Index)
- Primary diagnosis (Clinical Classification System)
- Co-morbidities (Charlson Score)
- Number of previous admissions
- Month of admission
- Whether a patient is being treated within the specialty of palliative care.

A published methodology for calculation of HSMRs was utilised

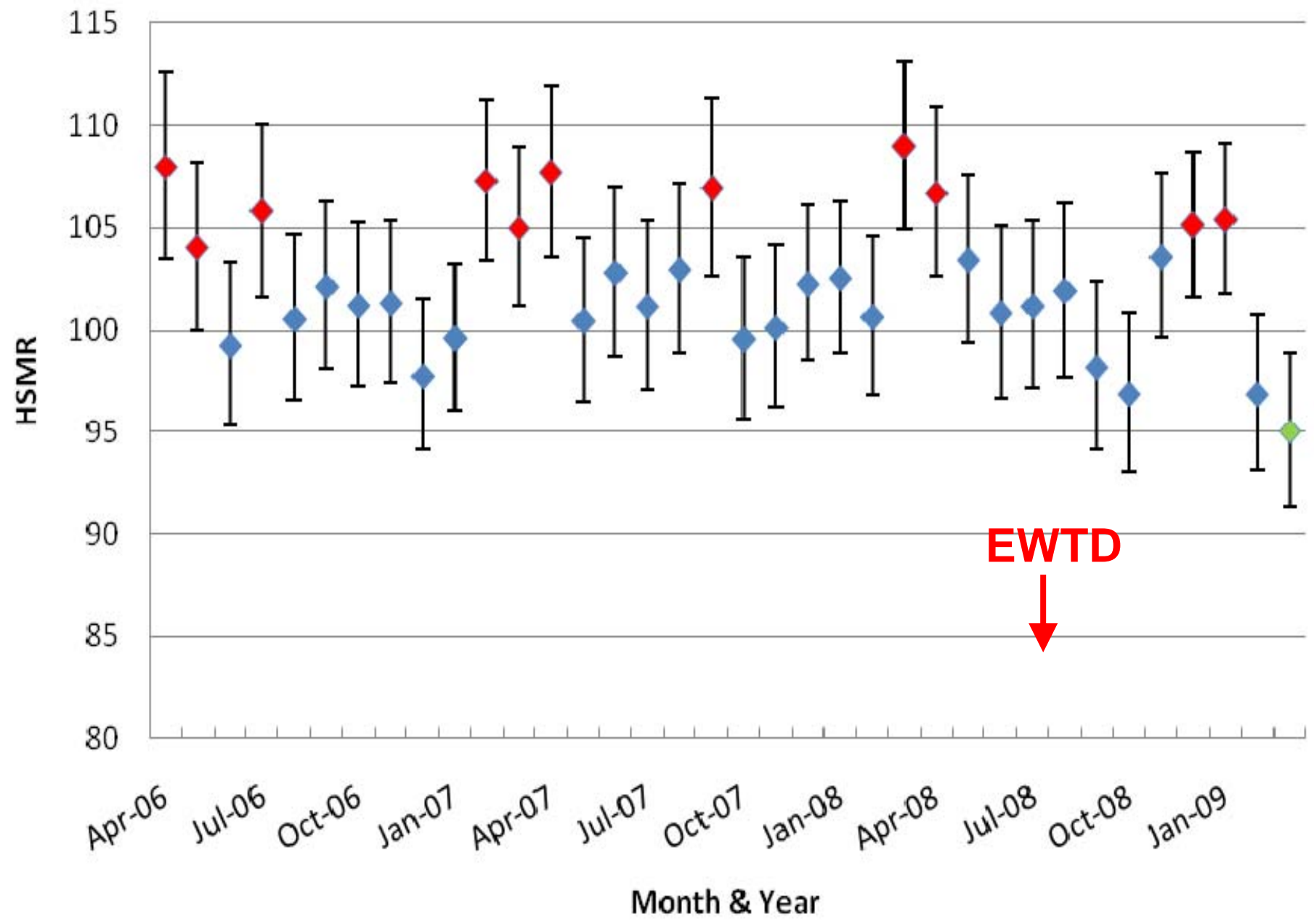
Average Length of Stay (ALOS)

- Measures the average duration of all patient episodes in hospital from the day of admission to the day of discharge
- Divided into ***elective*** and ***non-elective*** groups

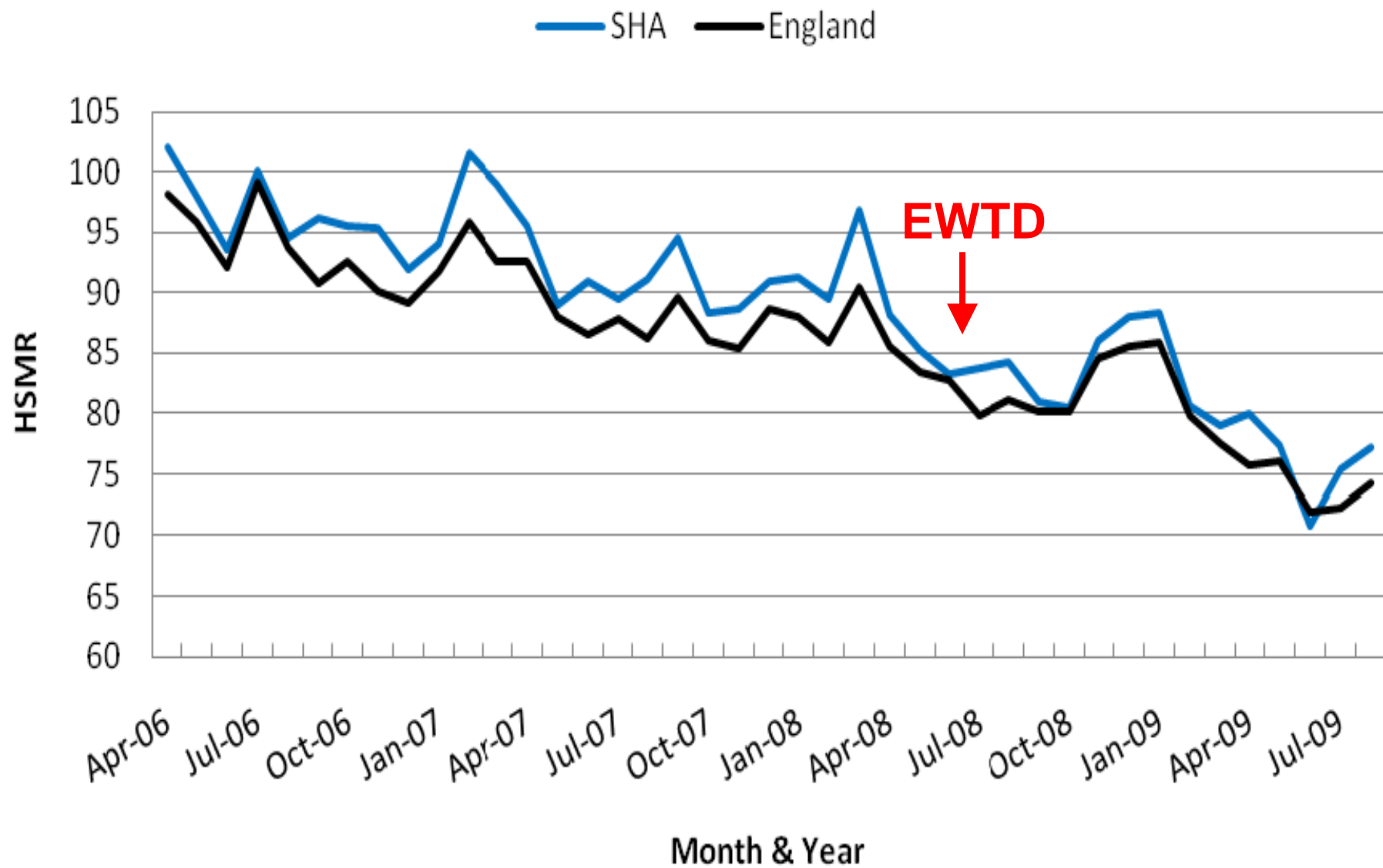
Standardised Readmission rate (SRR)

- Measures the number of **emergency readmissions**
- ...to acute trusts **within 28 days of discharge**, *where readmission was not part of the planned treatment.*
- **Standardised** to account for difference in case mix in the same way as HSMRs

NHS North West HSMR by Month from April 2006 to March 2009



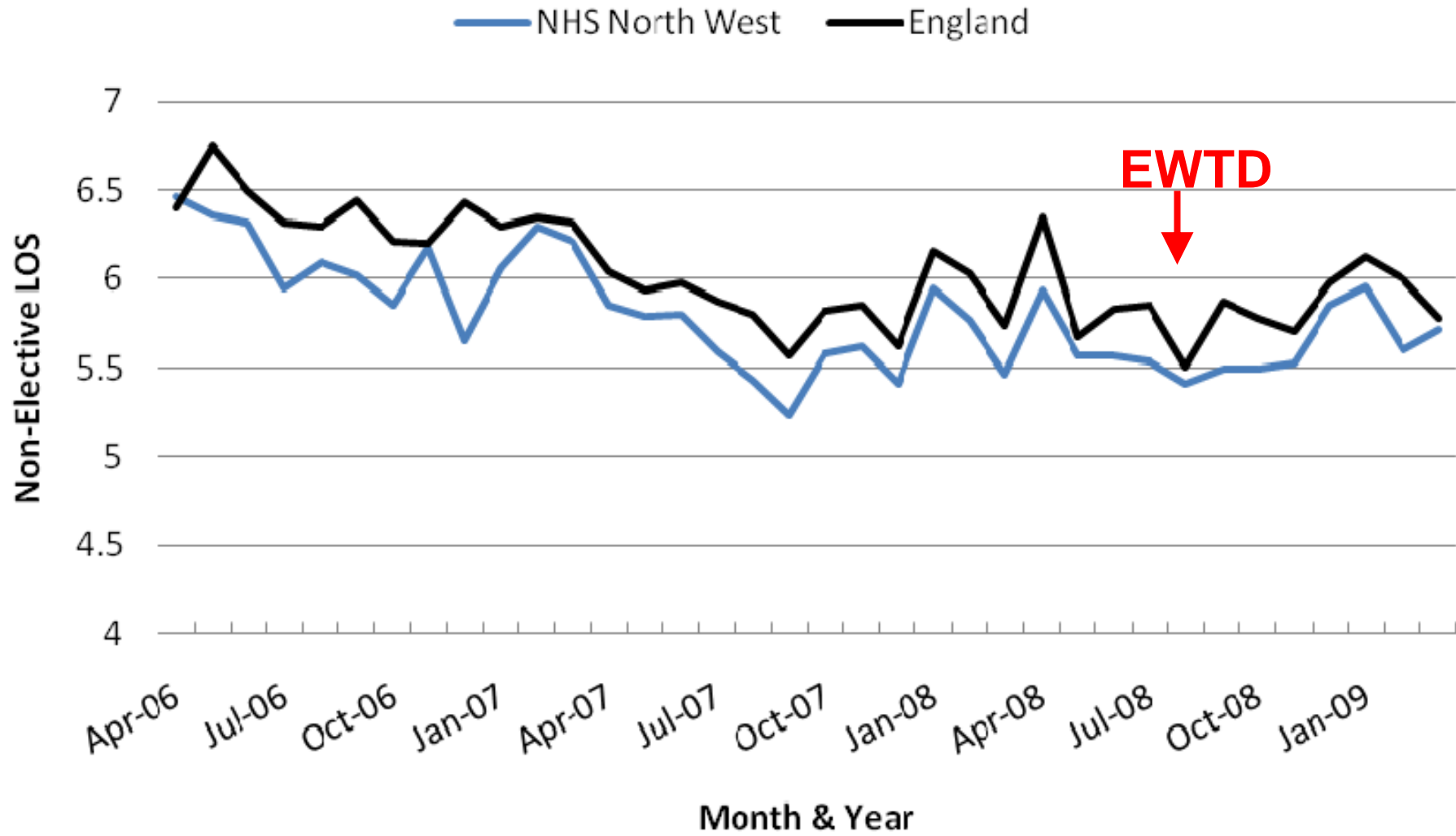
NHS North West & England HSMRs from April 2006 to August 2009 with 2005 Benchmarks



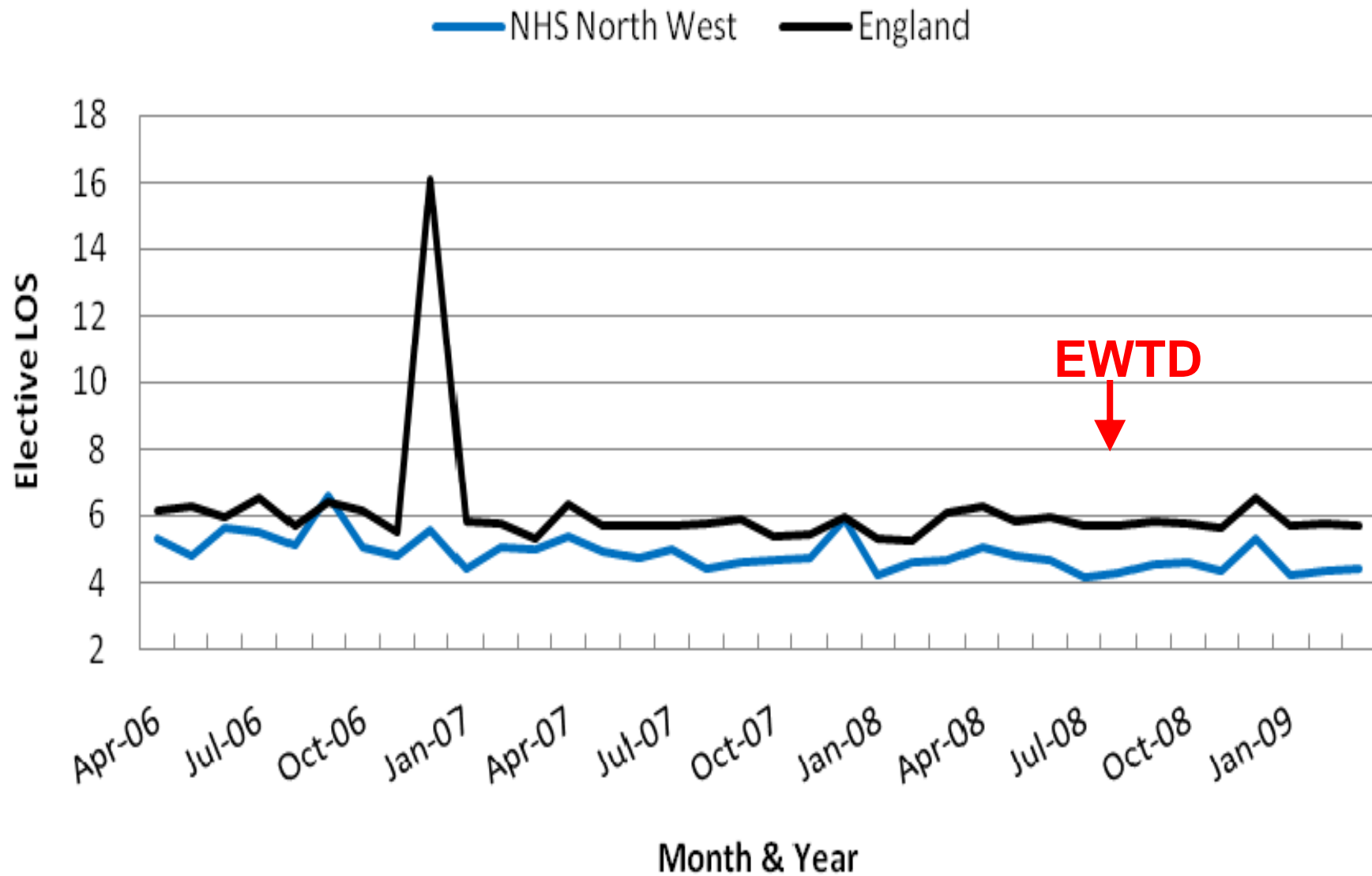
HSMR: Summary points

- ***No significant variation from the national HSMR trend following EWTD implementation in the North West...***
- ...or during the whole period of EWTD implementation
- Where NHS North West showed a decline in the HSMR trend, this is reflected in the national picture

Non-Elective Average Length Of Stay Comparison Between NHS North West and England April 2006 to March 2009



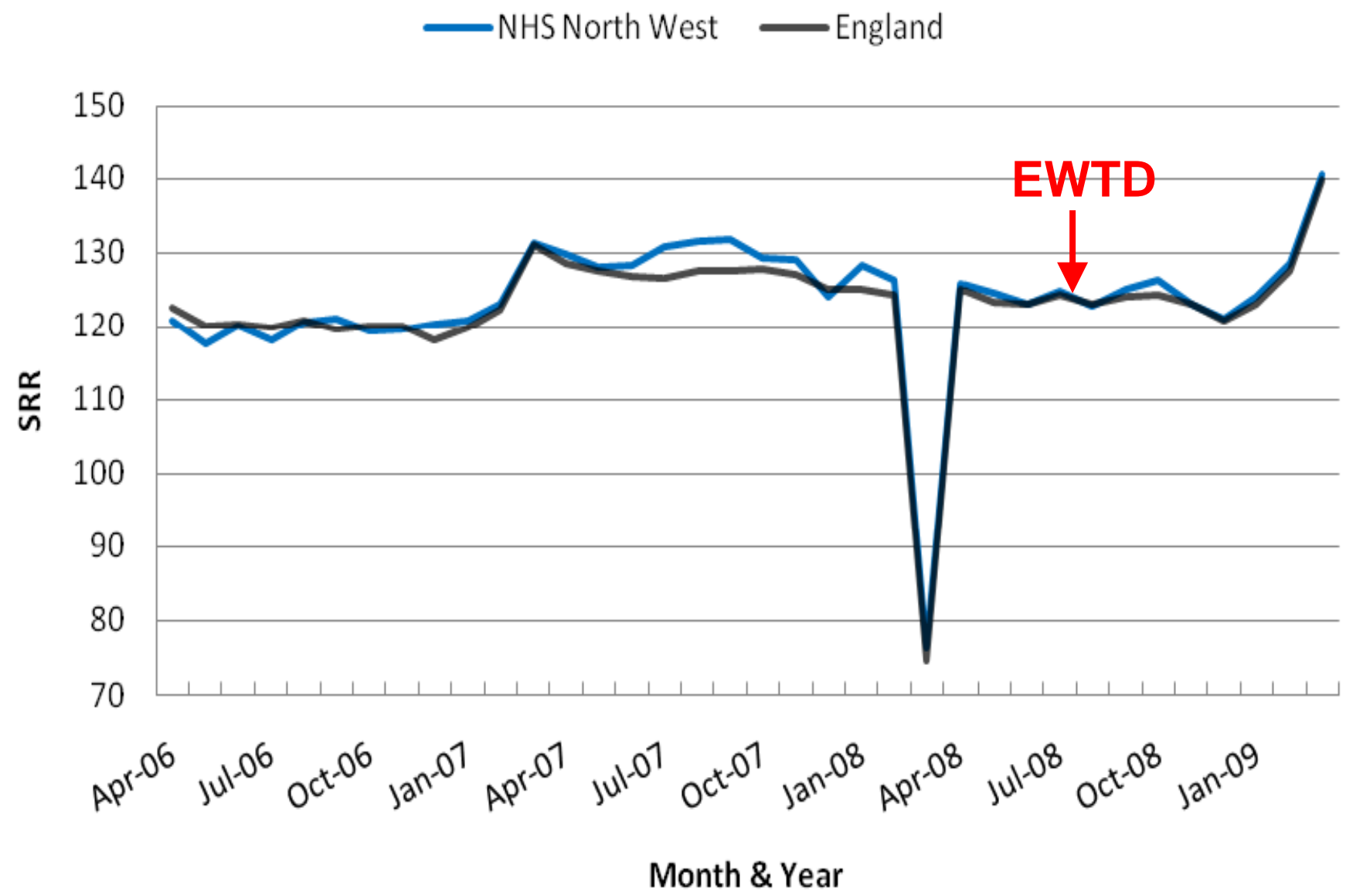
Elective Average Length Of Stay Comparison Between NHS North West and England April 2006 to March 2009



ALOS: Summary points

- Our data reveal a lower ALOS at NHS Northwest in comparison to England throughout the period studied
- Where there is an increase in national ALOS, this is mirrored at NHS North West
- ***From August 2008 the ALOS for NHS Northwest follows the national trend, although remains lower on average***

Standardised Readmission Rate at NHS North West & England April 2006 - March 2009



SRR: Summary points

- The SRR at NHS Northwest from April 2006 to March 2009 is similar to the national average
- ***No appreciable trend change in SRR following introduction of a 48hr week in NHS Northwest, or any significant divergence from the national average***

Credibility of HSMRs?

- ...have been **utilized worldwide** since the 90's to monitor provision of care over time and to identify opportunities for improvement
- ...have become an **internationally recognised objective measure of quality of care**
- *...adopted by Canadian Institute for Health Information as recently as 2005 in order to drive their patient safety agenda*

The pitfalls of HSMR analysis

NHS

North West

- administrative errors
- miscoding
- missing data

...however, missing data or miscoding would be unlikely to lead to the ***clear*** and ***consistent*** results that we have demonstrated

Was this comparison valid?

Was NHS North West truly 'compliant' with EWTD?

	EWTD compliance		
	Aug '08	Jan '09	Aug '09
NHS NW			
ENGLAND			

Was this comparison valid?

Was NHS North West truly 'compliant' with EWTD?

	EWTD compliance		
	Aug '08	Jan '09	Aug '09
NHS NW	94%*		
ENGLAND			

**British Journal of Health Care Management 2009*

Was this comparison valid?

Was NHS North West truly 'compliant' with EWTD?

	EWTD compliance		
	Aug '08	Jan '09	Aug '09
NHS NW	94%		
ENGLAND		72%	

Was this comparison valid?

Was NHS North West truly 'compliant' with EWTD?

	EWTD compliance		
	Aug '08	Jan '09	Aug '09
NHS NW	94%		
ENGLAND		72%	91%

Final points

- There is no evidence that EWTD implementation in the North West region of England has had any detrimental effect on parameters of patient safety
- ...In fact there has been **continued improvement** in these parameters since August 2008
- BUT...be aware of the challenge**, and **seize the opportunity**



NHS North West

Junior Doctor Advisory Team

Thanks